

an instruction port configured to receive a target identifier that indicates which data object is the target data object to be displayed on the visual display unit;

a list port configured to receive a list of data object identifiers, each data object identifier indicating one data object resulting from searching the information location mechanism;

a data port configured to receive the target data object;

an output port configured to output the target data object and a navigation control to the client process; and

a controller configured to:

receive the target identifier from the instruction port,

receive the list from the list port,

receive the target data object from the data port,

create the navigation control with one navigation element for each data object indicated by the list, with the exception of the target data object, wherein the navigation control uses less display area than the display area occupied by the aggregate of the titles of every data object in the list, and

send the data object and the navigation control to the output port;

thereby saving a user time by enabling the user to access any data object that met their search criteria while viewing any target data object and without returning each time to the list of data objects resulting from their search.

35. The system recited in claim 34 wherein at least one of the instruction port, list port, data port, and output port is coupled to an HTTP Web server, or coupled to a computer-readable media, or configured to communicate via a standard electronic messaging protocol.



- 36. The system recited in claim 34 wherein the data port is coupled to at least one of a document, a database, a database management system, a search engine supporting full-text search, a search engine supporting fielded search, a search engine supporting regular expressions or other patterns, and an iterative search engine.
- 37. The system recited in claim 34 wherein each data object is comprised of a database record, a document, or some other grouping of associated data elements.
- 38. The system recited in claim 34 wherein each data element is comprised of a database field, tagged data including HTML, XML, or SGML, meta data, or a document.
- 39. The system recited in claim 34 wherein each data element is part of a data object, the data object having at least one data unit of employment information.
- 40. The system recited in claim 34 wherein the controller is configured to create a navigation element for the target data object.
- 41. The system recited in claim 40 wherein the navigation element for the target data object has a different appearance than the navigation elements for other data objects.
- 42. The system recited in claim 41 wherein the appearance is made visually distinct by changing at least one of the geometry, layout, text font or typeface, text size, text style, text color and background color of part or all of the navigation element for the target data object.
- 43. The system recited in claim 40 wherein the navigation element for the target data object is not a hypertext link.
- 44. The system recited in claim 34 wherein the controller is configured to add an additional navigation element linked to the data object prior to the target data object, if any.
- 45. The system recited in claim 44 wherein the additional navigation element is a left-facing or up-facing arrow, rendered textually or graphically.



- 46. The system recited in claim 44 wherein the additional navigation element for the target data object comprises a text label "PREVIOUS" or similar abbreviation, word or phrase in English or other language.
- 47. The system recited in claim 34 wherein the controller is configured to add an additional navigation element linked to the data object following the target data object, if any.
- 48. The system recited in claim 47 wherein the additional navigation element is a right-facing or down-facing arrow, rendered textually or graphically.
- 49. The system recited in claim 47 wherein the additional navigation element for the target data object comprises a text label "NEXT" or similar abbreviation, word or phrase in English or other language.
- 50. The system recited in claim 34 wherein each navigation element is configured such that the client process will display additional information about the associated data object when a user moves a UD over the navigation element.
- 51. The system recited in claim 50 wherein the additional information is the title of the target data object.
- 52. The system recited in claim 34 wherein each navigation element can be activated by a user with a single action using a UD.
  - 53. The system recited in claim 52 wherein the single action is a click or tap.
  - 54. The system recited in claim 34 wherein the single action is press-drag-release.
- 55. The system recited in claim 34 wherein the navigation elements are arranged horizontally.
- 56. The system recited in claim 34 wherein the navigation elements are arranged vertically.



- 57. The system recited in claim 34 wherein the target identifier is a data element identifier.
  - 58. The system recited in claim 34 wherein the target identifier is an index into the list.
- 59. The system recited in claim 34, further including a list identifier port configured to receive a list identifier, and wherein the list port is coupled to storage, and wherein the controller is configured to get the identified list from storage via the list port.
- 60. The system recited in claim 59 wherein the list identifier port and the instruction port are the same port, and wherein the controller is configured to extract the target identifier and the list identifier from the instruction port.
  - 61. The system recited in claim 34, further including:
  - a data cache configured to store a copy of zero or more data objects;
  - a cache manager configured to:

check if the target data object is already stored in the data cache;

if not, get a copy of the data object via the data port and store it in the data cache;

return a copy of the data object from the data cache to the controller;

and wherein the controller is configured to receive the data objects from the cache manager or from the data port or from both the cache manager and the data port.

62. A search system comprising:

a search port configured to receive search criteria;

an information location mechanism configured to locate a plurality of data objects that match the received search criteria, each data object having an identifier, each data object

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having a plurality of data elements, each data element having some or no contents, one of said data elements being a title;

a formatting engine configured to format a result list comprising a subset of information from each matching data object;

a client process configured to display on a visual display unit;

an access mechanism that provides direct access to every data object while displaying any data object on the visual display unit via the client process, the access mechanism comprising:

an instruction port configured to receive a target identifier that indicates which data object is the target data object to be displayed on the visual display unit;

a list port configured to receive a list of data object identifiers, each identifier indicating one data object resulting from searching the information location mechanism;

a data port configured to receive the target data object;

an output port configured to output the target data object and a navigation control to the client process; and

a controller configured to:

transfer search criteria from the search port to the information location mechanism;

transfer the data object identifier for each data object returned by the information location mechanism from the information location mechanism to the list port;

receive the target identifier from the instruction port,

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receive the target data object from the data port,

create the navigation control with one navigation element for each data object in the list, with the exception of the target data object, wherein the navigation control uses less display area than the display area occupied by the aggregate of the titles of every data object in the list, and

send the data object and the navigation control to the output port;

- 63. The search system recited in claim 62 wherein the controller creates a formatted representation of the navigation control employing a markup language including HTML, XML or SGML.
- 64. The search system recited in claim 62 wherein the contents of at least one data element of at least one data object include employment information.
  - 65. The search system recited in claim 62, further including:
  - a sort port configured to receive sort criteria;

an information sorting mechanism coupled between the information location mechanism and the formatting engine; the information sorting mechanism being configured to receive the sort criteria in a predetermined syntax, receive a plurality of data objects from the information location mechanism, sort the data objects according to the sort criteria, and forward the sorted data objects to the visual display unit.

66. A method that provides direct access to every data object while viewing any data object on a visual display unit via a client process, each data object resulting from searching an information location mechanism, each data object having an identifier, each data object having a plurality of data elements, each data element having some or no contents, one of said data elements being a title, the method comprising: